

CURRICULUM VITAE

NAME: Eui-Cheol Shin, M.D., Ph.D.

PRESENT POSITION: Associate Professor,
Graduate School of Medical Science & Engineering, KAIST

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EDUCATION:

1990-1996: M.D., Yonsei University College of Medicine, Seoul, Korea
1996-2001: Ph.D. (in Microbiology & Immunology),
Yonsei University College of Medicine, Seoul, Korea

CAREER:

1999-2002: Medical Scientist, Department of Microbiology,
The Armed Forces Medical Research Institute, Daejeon, Korea,
(Mandatory military service)

2002-2007: Research Fellow, Immunology Section, Liver Diseases Branch, National
Institute of Diabetes and Digestive and Kidney Diseases (NIDDK),
National Institutes of Health (NIH), Bethesda, MD, USA
(Advisor: Barbara Rehermann, M.D.)

2007-2013: Assistant Professor, Graduate School of Medical Science and
Engineering, KAIST, Daejeon, Korea

2013-present: Associate Professor, Graduate School of Medical Science and
Engineering, KAIST, Daejeon, Korea

ACTIVITIES:

2011-2012: Chairman, Vaccine Interest Group,
The Korean Association of Immunologists, Korea

2014-present: Academic Committee Chair,
The Korean Vaccine Society

2012-present: Editorial Board, *Clinical and Experimental Medicine*

2013-present: Deputy Editor, *Immune Network*

2007-present: Ad Hoc Reviewer, *Journal of Infectious Diseases, Gastroenterology,*
International Immunology, Vaccine, Future Microbiology, Virology
Journal, PLoS One, Journal of Virology etc

SOCIETY MEMBERSHIP: The Korean Association of Immunologists
The Korean Vaccine Society
The American Association of Immunologists
The American Association for the Study of Liver Diseases

RESEARCH INTERESTS: Hepatitis Viruses,
Viral Immunology,
Virus-Host Interaction,
Human Immunology

PUBLICATIONS (SELECTED FROM RECENT 5-YEARS):

1. **Shin EC**, Park SH, DeMino M, Nascimbeni M, Mihalik K, Major M, Veerapu NS, Heller T,

- Feinstone SM, Rice CM, Rehermann B. Delayed induction, not impaired recruitment, of specific CD8⁺ T cells causes the late onset of acute hepatitis C. *Gastroenterology* 141:686-695, 2011
2. Lee DH, Kim SH, Kang W, Choi YS, Lee SH, Lee SR, You S, Lee HK, Chang KT, **Shin EC**. Adjuvant effect of bacterial outer membrane vesicles with penta-acylated lipopolysaccharide on antigen-specific T cell priming. *Vaccine* 29:8293-8301, 2011
 3. Park J, Kang W, Ryu SW, Kim WI, Chang DY, Lee DH, Park DY, Choi YH, Choi K, **Shin EC**, Choi C. Hepatitis C virus infection enhances tumor necrosis factor- α -induced cell death via suppression of nuclear factor- κ B. *Hepatology* 56:831-840, 2012
 4. Park SH, **Shin EC**, Capone S, Caggiari L, De Re V, Nicosia A, Folgari A, Rehermann B. Successful vaccination induces multifunctional memory T cell precursors associated with early hepatitis C virus control. *Gastroenterology* 143:1048-1060, 2012
 5. **Shin EC**, Park SH, Nascimbeni M, Major M, Caggiari L, de Re V, Feinstone SM, Rice CM, Rehermann B. The frequency of CD127⁺ hepatitis C virus (HCV)-specific T cells but not the expression of exhaustion markers predict the outcome of acute HCV infection. *J Virol* 87:4772-4777, 2013
 6. Choi YS, Lee JE, Nam SJ, Park JT, Kim HS, Choi KH, Kim BS, **Shin EC**. Two distinct functional patterns of hepatitis C virus (HCV)-specific T cell responses in seronegative, aviremic patients. *Plos One* 8:e62319, 2013
 7. Hong S, Lee HW, Chang DY, You S, Kim J, Park JY, Ahn SH, Yong D, Han KH, Yoo OJ, **Shin EC**. Antibody-secreting cells with a phenotype of Ki-67^{low}, CD138^{high}, CD31^{high}, and CD38^{high} secrete nonspecific IgM during primary hepatitis A virus infection. *J Immunol* 191:127-134, 2013
 8. Jang YS, Kang W, Chang DY, Sung PS, Park BC, Yoo SH, Park YW, **Shin EC**. CD27 engagement by a soluble CD70 protein enhances non-cytolytic antiviral activity of CD56^{bright} natural killer cells by IFN- γ secretion. *Clin Immunol* 149:379-387, 2013
 9. Kang W, Sung PS, Park SH, Yoon S, Chang DY, Kim S, Han KH, Kim JK, Rehermann B, Chwae YJ, **Shin EC**. Hepatitis C virus attenuates interferon-induced MHC class I expression and decreases CD8⁺ T cell effector functions. *Gastroenterology* 146:1351-1360, 2014
 10. Sung PS, Racanelli V, **Shin EC**. CD8⁺ T-cell responses in acute hepatitis C virus infection. *Front Immunol* 5:266, 2014
 11. Sung PS, Murayama A, Kang W, Kim MS, Yoon SK, Fukasawa M, Kondoh M, Kim JS, Kim H, Kato T, **Shin EC**. Hepatitis C virus entry is impaired by claudin-1 downregulation in diacylglycerol acyltransferase-1-deficient cells. *J Virol* 88:9233-9244, 2014
 12. Chang DY, Song SH, You S, Lee J, Kim J, Racanelli V, Son H, **Shin EC**. Programmed death-1 (PD-1)-dependent functional impairment of CD4⁺ T cells in recurrent genital papilloma. *Clin Exp Med* 14:305-313, 2014
 13. Yu HT, Youn JC, Lee J, Park S, Chi HS, Lee J, Choi C, Park S, Choi D, Ha JW, **Shin EC**. Characterization of CD8⁺CD57⁺ T cells in patients with acute myocardial infarction. *Cell Mol Immunol* 12:466-473, 2015
 14. Choi YS, Lee J, Lee HW, Chang DY, Sung PS, Jung MK, Park JY, Kim JK, Lee JI, Park H, Cheong JY, Suh KS, Kim HJ, Lee JS, Kim KA, **Shin EC**. Liver injury in acute hepatitis A is associated with decreased frequency of regulatory T cells caused by Fas-mediated apoptosis. *Gut* 64:1303-1313, 2015
 15. Sung PS, Cheon HJ, Cho CH, Hong SH, Park DY, Seo HI, Park SH, Yoon SK, Stark GR, **Shin EC**. Roles of unphosphorylated-ISGF3 in HCV infection and interferon responsiveness. *Proc*

Natl Acad Sci USA 112:10443-10448, 2015

16. Kim JH, Choi YJ, Lee BH, Song MY, Ban CY, Kim J, Park J, Kim SE, Kim TG, Park SH, Kim HP, Sung YC, Kim SC, **Shin EC**. Programmed cell death-ligand 1 alleviates psoriatic inflammation by suppressing IL-17A production from PD-1^{hi} T cells. *J Allergy Clin Immunol* 2016 Epub ahead of print
17. Kim N, Kim MJ, Sung PS, Bae YC, **Shin EC**, Yoo JY. Interferon-inducible protein SCOTIN interferes with HCV replication through the autolysosomal degradation of NS5A. *Nat Commun* 7:10631, 2016
18. **Shin EC**, Sung PS, Park SH. Immune responses and immunopathology in acute and chronic viral hepatitis. *Nat Rev Immunol* (invited and currently under review)